

Annex for FCC BLE

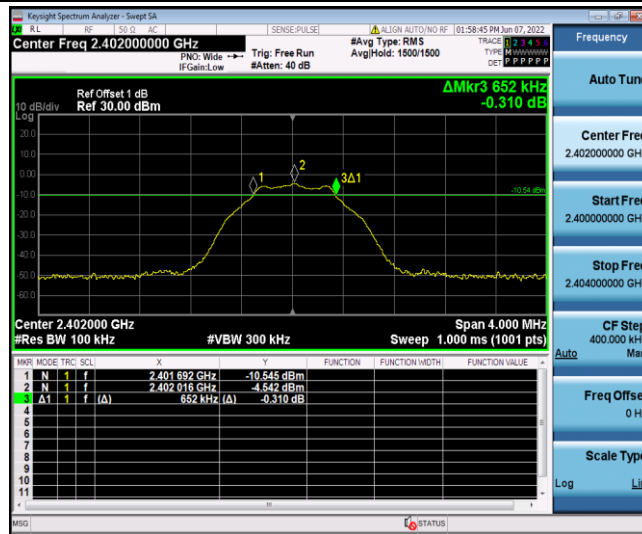
Test Report No.: CTL2205129022-WF04

Appendix A: DTS Bandwidth

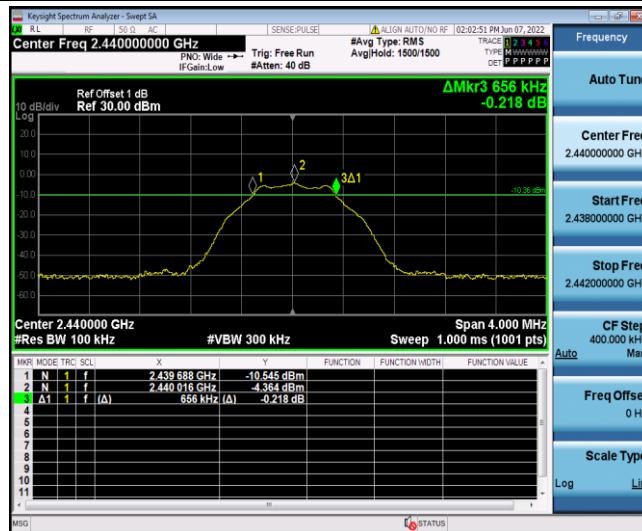
Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_BT4.0	Ant1	2402	0.652	2401.692	2402.344	0.5	PASS
		2440	0.656	2439.688	2440.344	0.5	PASS
		2480	0.656	2479.688	2480.344	0.5	PASS
BLE_BT5.0	Ant1	2402	1.128	2401.460	2402.588	0.5	PASS
		2440	1.128	2439.460	2440.588	0.5	PASS
		2480	1.128	2479.460	2480.588	0.5	PASS

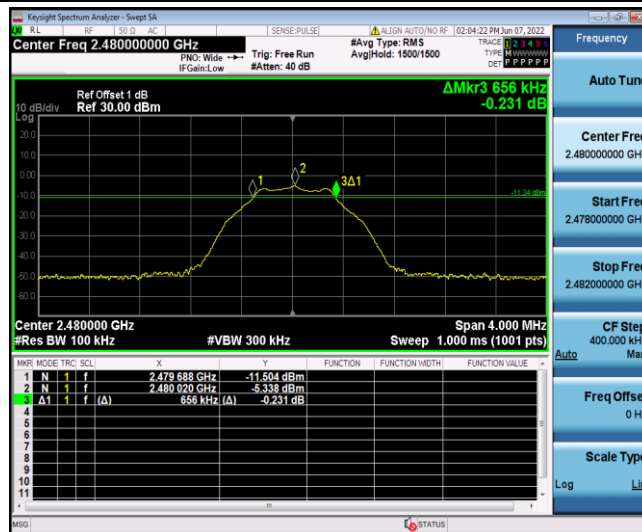
Test Graphs



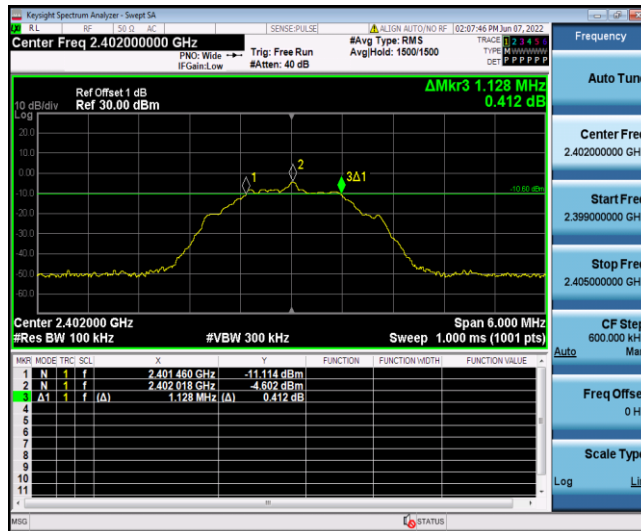
BLE_BT4.0_Ant1_2402



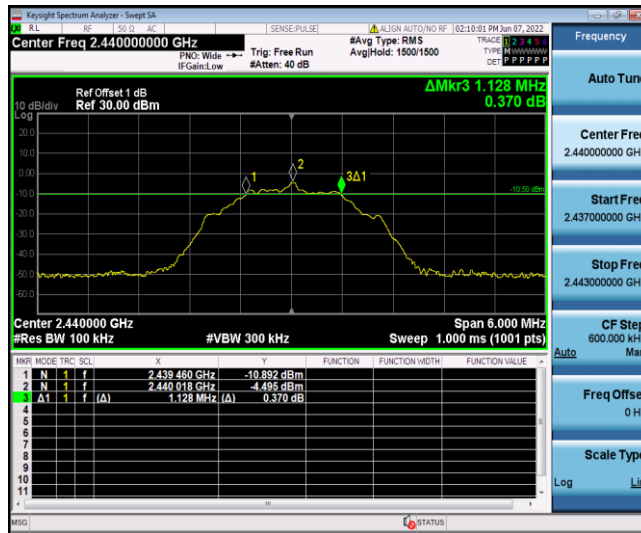
BLE_BT4.0_Ant1_2440



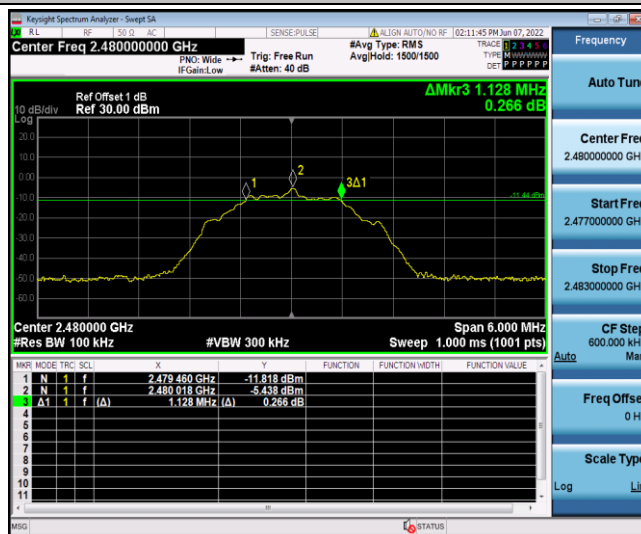
BLE_BT4.0_Ant1_2480



BLE BT5.0 Ant1_2402



BLE BT5.0 Ant1_2440



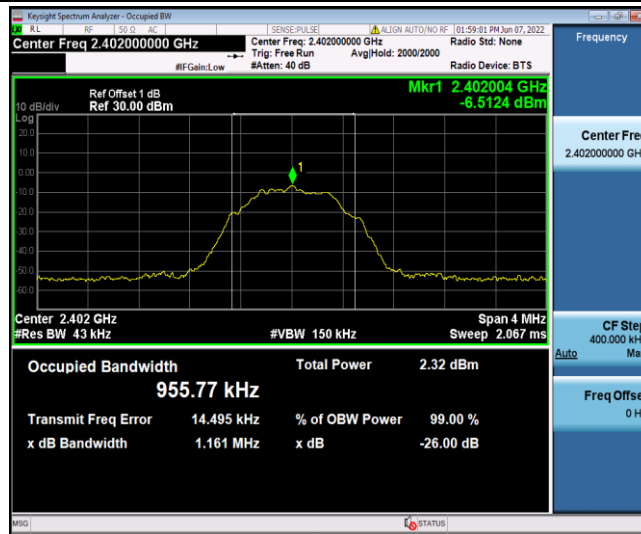
BLE BT5.0 Ant1_2480

Appendix B: Occupied Channel Bandwidth

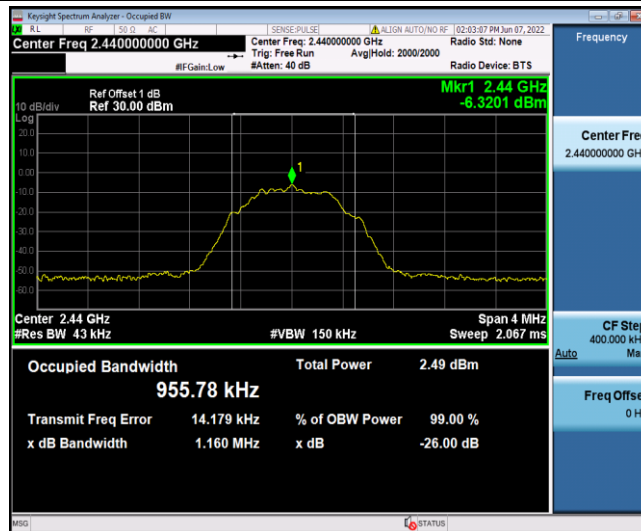
Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_BT4.0	Ant1	2402	0.95577	2401.537	2402.492	---	PASS
		2440	0.95578	2439.536	2440.492	---	PASS
		2480	0.95565	2479.536	2480.491	---	PASS
BLE_BT5.0	Ant1	2402	1.9690	2401.038	2403.007	---	PASS
		2440	1.9720	2439.036	2441.008	---	PASS
		2480	1.9723	2479.035	2481.007	---	PASS

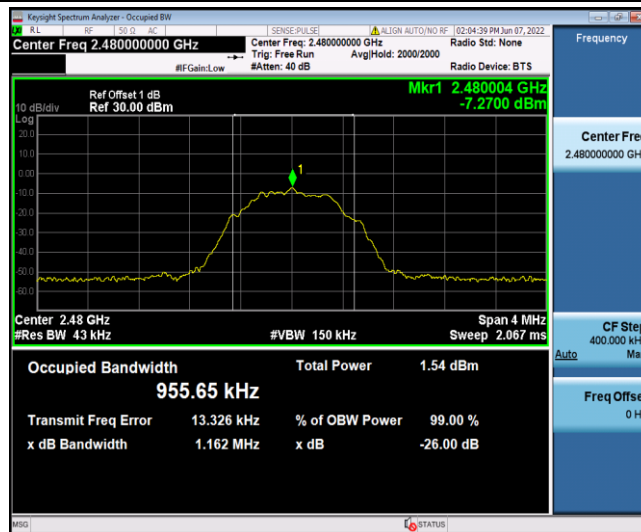
Test Graphs



BLE_BT4.0_Ant1_2402



BLE_BT4.0_Ant1_2440



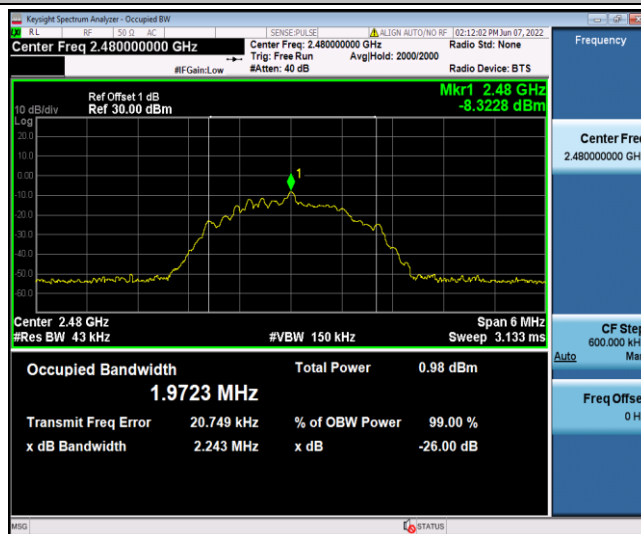
BLE_BT4.0_Ant1_2480



BLE BT5.0 Ant1_2402



BLE BT5.0 Ant1_2440



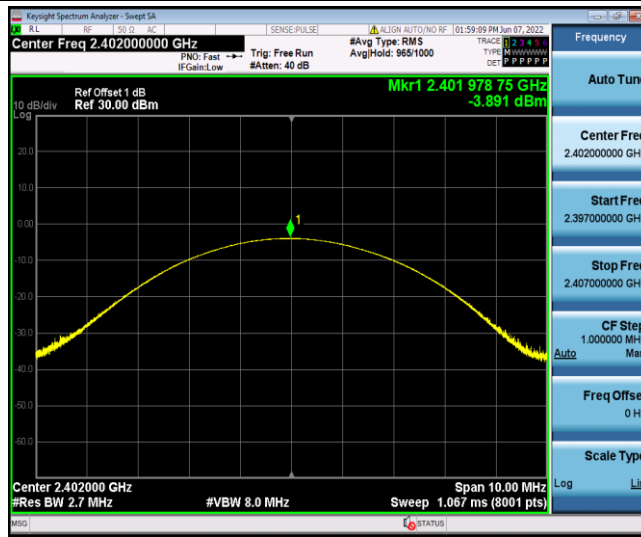
BLE BT5.0 Ant1_2480

Appendix C: Maximum conducted output power

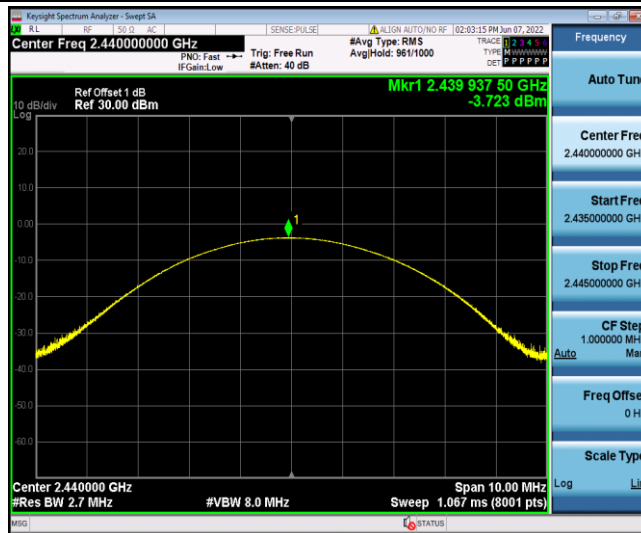
Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_BT4.0	Ant1	2402	-3.89	≤30	PASS
		2440	-3.72	≤30	PASS
		2480	-4.6	≤30	PASS
BLE_BT5.0	Ant1	2402	-3.97	≤30	PASS
		2440	-3.83	≤30	PASS
		2480	-4.78	≤30	PASS

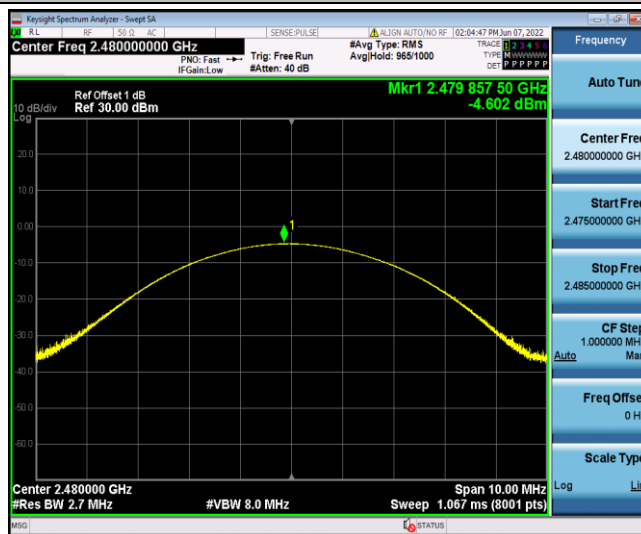
Test Graphs



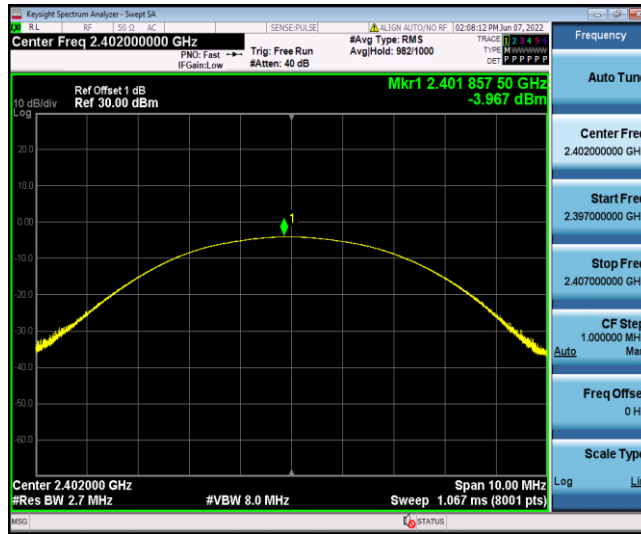
BLE_BT4.0_Ant1_2402



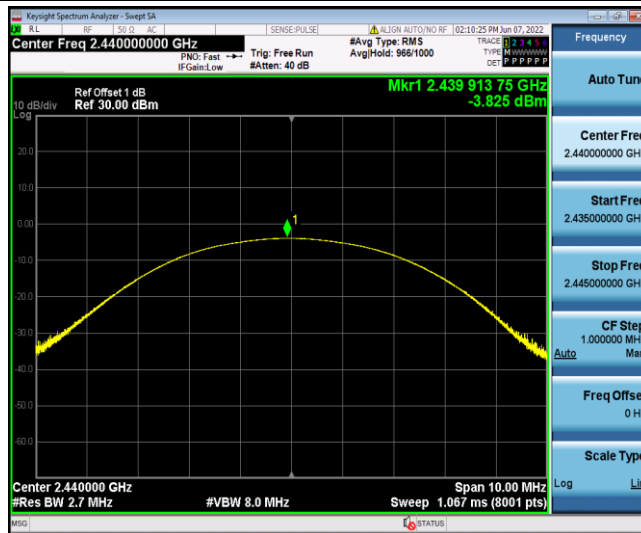
BLE_BT4.0_Ant1_2440



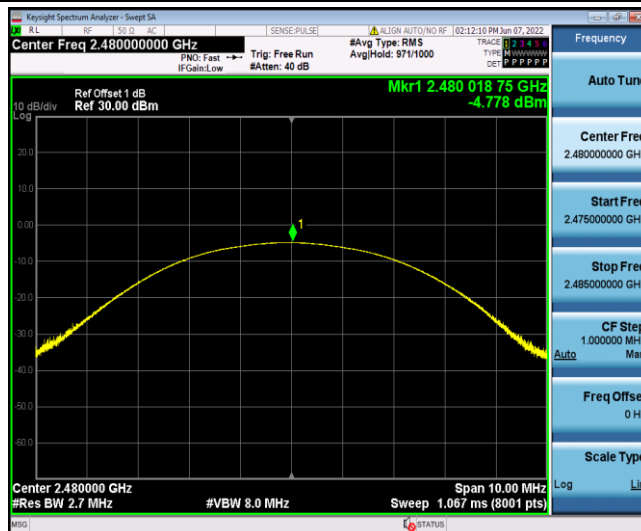
BLE_BT4.0_Ant1_2480



BLE_BT5.0_Ant1_2402



BLE_BT5.0_Ant1_2440



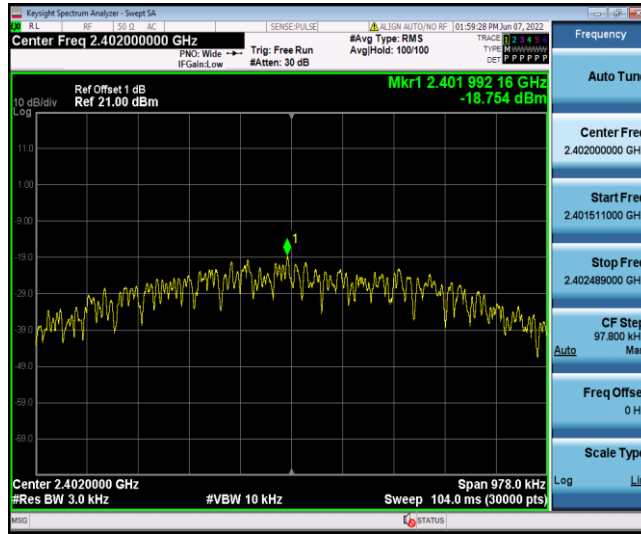
BLE_BT5.0_Ant1_2480

Appendix D: Maximum power spectral density

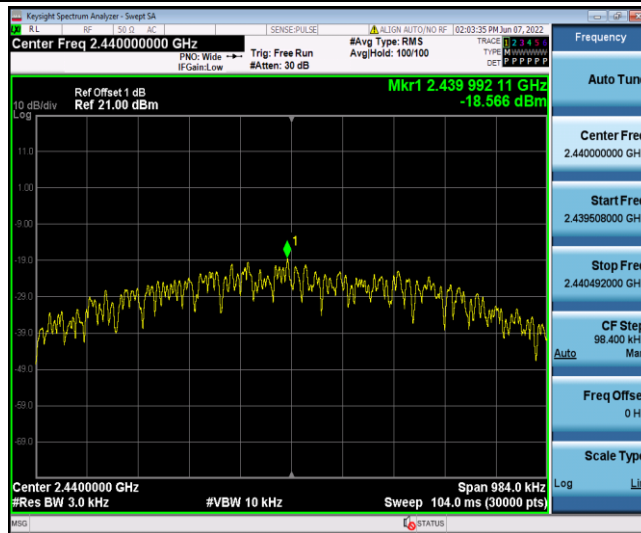
Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_BT4.0	Ant1	2402	-18.75	≤8	PASS
		2440	-18.57	≤8	PASS
		2480	-19.6	≤8	PASS
BLE_BT5.0	Ant1	2402	-21.37	≤8	PASS
		2440	-21.22	≤8	PASS
		2480	-22.17	≤8	PASS

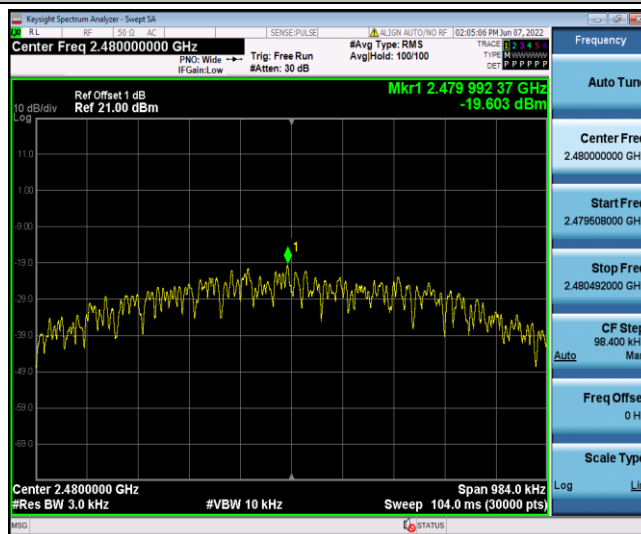
Test Graphs



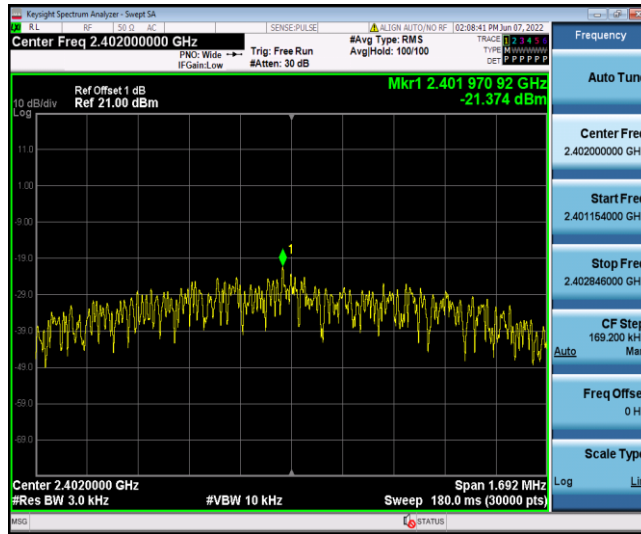
BLE_BT4.0_Ant1_2402



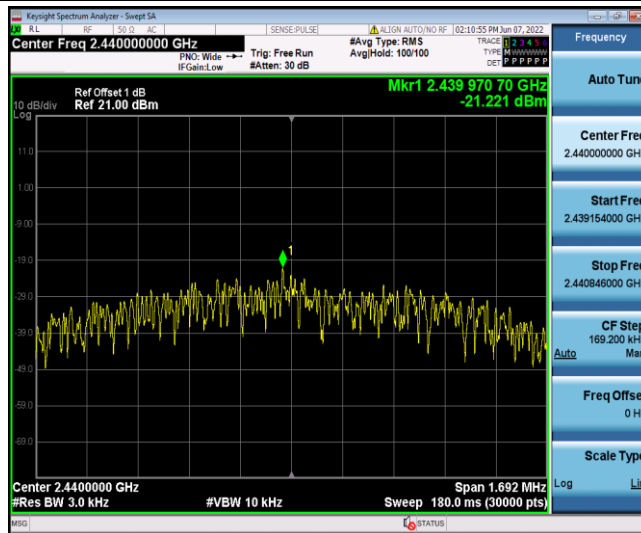
BLE_BT4.0_Ant1_2440



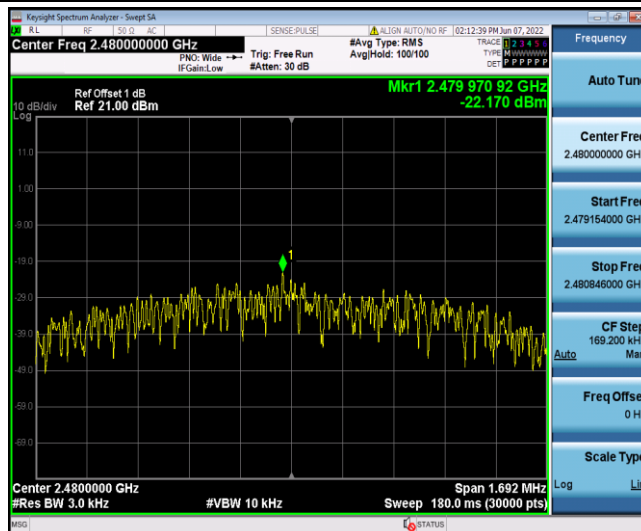
BLE_BT4.0_Ant1_2480



BLE_BT5.0_Ant1_2402



BLE_BT5.0_Ant1_2440



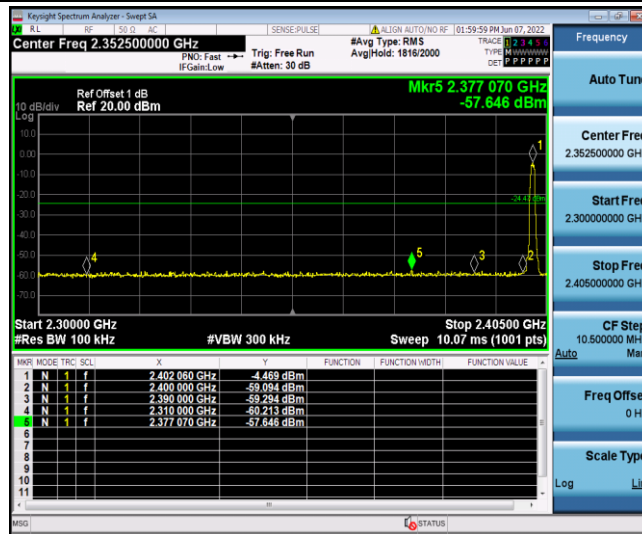
BLE_BT5.0_Ant1_2480

Appendix E: Band edge measurements

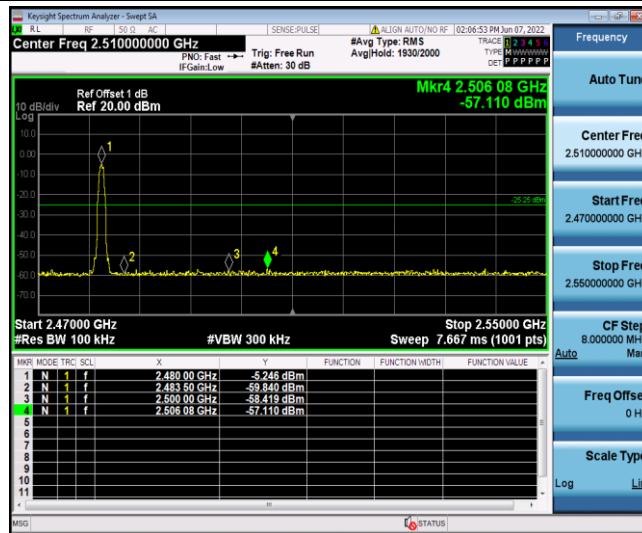
Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_BT4.0	Ant1	Low	2402	-4.47	-57.65	≤-24.47	PASS
		High	2480	-5.25	-57.11	≤-25.25	PASS
BLE_BT5.0	Ant1	Low	2402	-4.50	-51.8	≤-24.5	PASS
		High	2480	-5.32	-56.73	≤-25.32	PASS

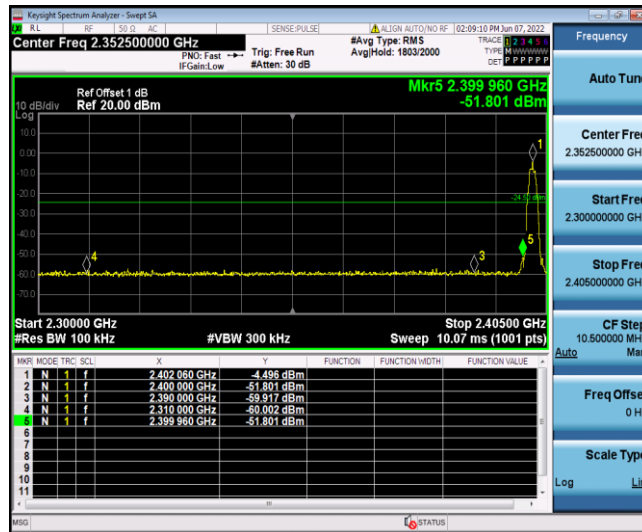
Test Graphs



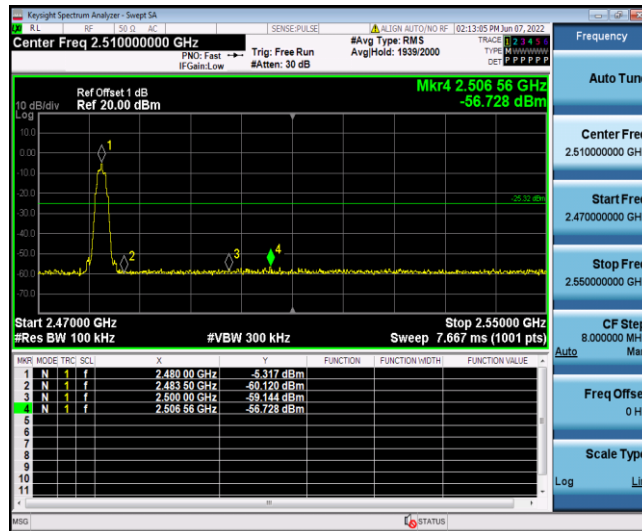
BLE_BT4.0_Ant1_Low_2402



BLE_BT4.0_Ant1_High_2480



BLE_BT5.0_Ant1_Low_2402



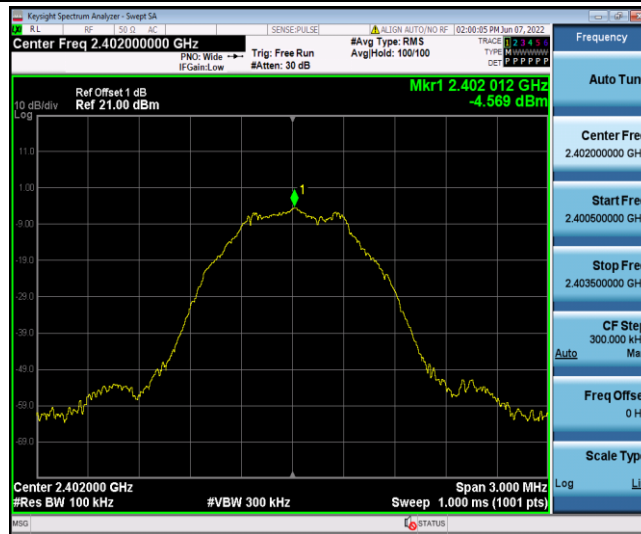
BLE_BT5.0_Ant1_High_2480

Appendix F: Conducted Spurious Emission

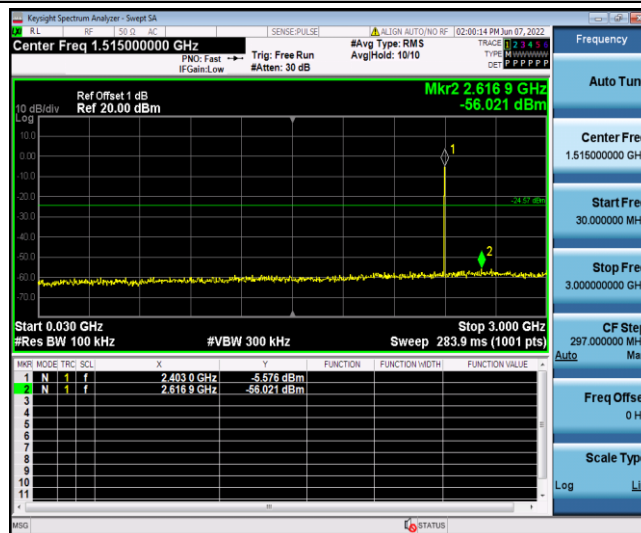
Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_BT4.0	Ant1	2402	Reference	-4.57	-4.57	---	PASS
			30~3000	-4.57	-56.02	≤-24.57	PASS
			3000~26500	-4.57	-44.88	≤-24.57	PASS
		2440	Reference	-4.37	-4.37	---	PASS
			30~3000	-4.37	-55.23	≤-24.37	PASS
			3000~26500	-4.37	-45.11	≤-24.37	PASS
		2480	Reference	-5.44	-5.44	---	PASS
			30~3000	-5.44	-56.25	≤-25.44	PASS
			3000~26500	-5.44	-44.49	≤-25.44	PASS
BLE_BT5.0	Ant1	2402	Reference	-4.63	-4.63	---	PASS
			30~3000	-4.63	-55.95	≤-24.63	PASS
			3000~26500	-4.63	-44.49	≤-24.63	PASS
		2440	Reference	-4.47	-4.47	---	PASS
			30~3000	-4.47	-56.48	≤-24.47	PASS
			3000~26500	-4.47	-43.66	≤-24.47	PASS
		2480	Reference	-5.58	-5.58	---	PASS
			30~3000	-5.58	-55.95	≤-25.58	PASS
			3000~26500	-5.58	-44.96	≤-25.58	PASS

Test Graphs



BLE_BT4.0_Ant1_2402_0~Reference



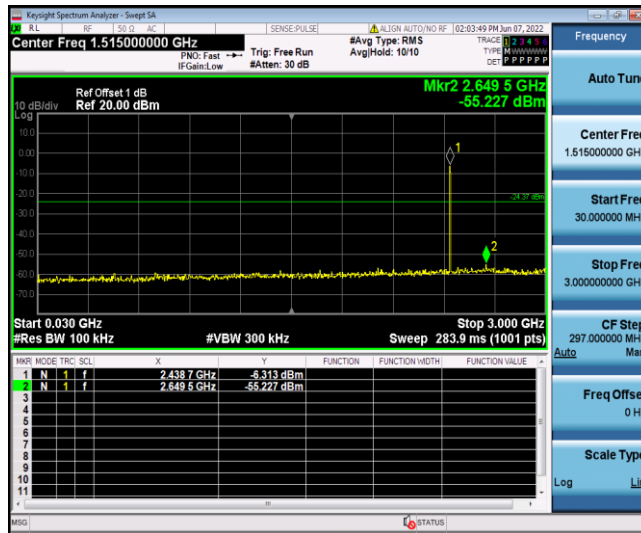
BLE_BT4.0_Ant1_2402_30~3000



BLE_BT4.0_Ant1_2402_3000~26500



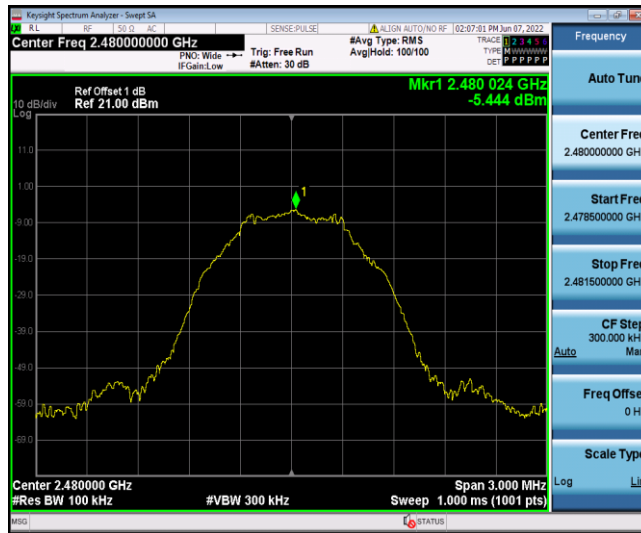
BLE_BT4.0_Ant1_2440_0~Reference



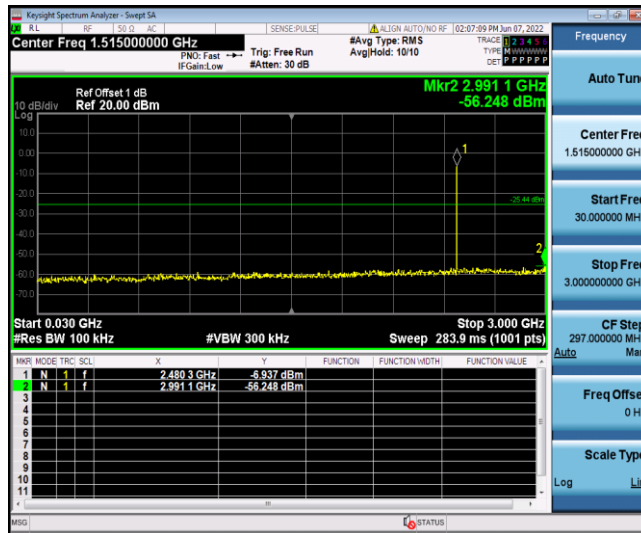
BLE_BT4.0_Ant1_2440_30~3000



BLE_BT4.0_Ant1_2440_3000~26500



BLE_BT4.0_Ant1_2480_0~Reference



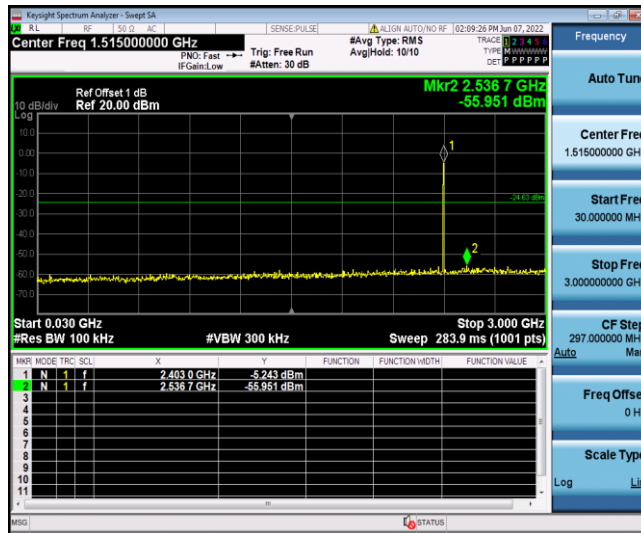
BLE_BT4.0_Ant1_2480_30~3000



BLE_BT4.0_Ant1_2480_3000~26500



BLE_BT5.0_Ant1_2402_0~Reference



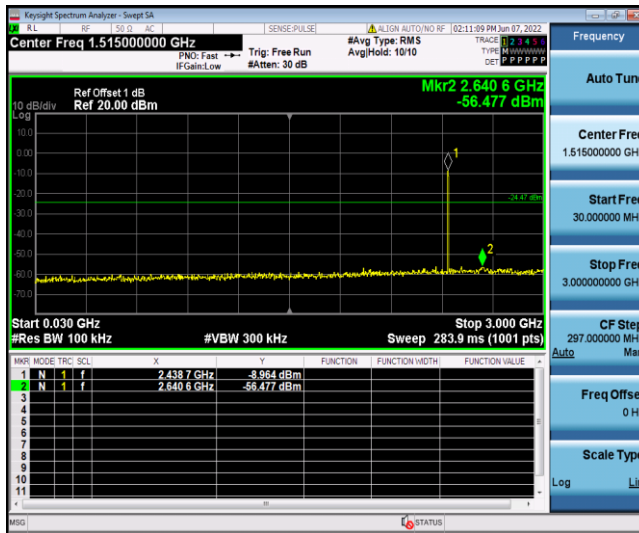
BLE_BT5.0_Ant1_2402_30~3000



BLE_BT5.0_Ant1_2402_3000~26500



BLE_BT5.0_Ant1_2440_0~Reference



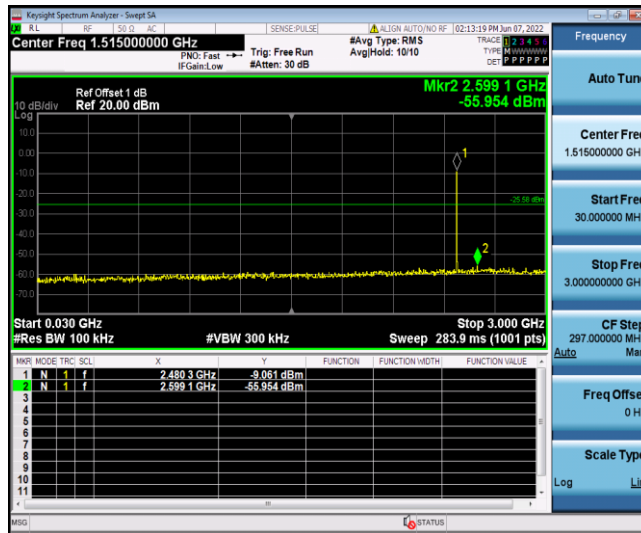
BLE_BT5.0_Ant1_2440_30~3000



BLE_BT5.0_Ant1_2440_3000~26500



BLE_BT5.0_Ant1_2480_0~Reference



BLE_BT5.0_Ant1_2480_30~3000



BLE_BT5.0_Ant1_2480_3000~26500

***** End *****